



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2020-0781; Product Identifier 2018-CE-045-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Mitsubishi Heavy Industries, Ltd. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 75-16-20, which applies to all Mitsubishi Model MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36 airplanes. AD 75-16-20 requires repetitive inspections of the propeller pitch control (PPC) lever for security and proper rigging. Since the FAA issued AD 75-16-20, the FAA received additional reports of the PPC lever linkage disconnecting at the engine. In addition, Mitsubishi has type certificated additional airplanes that are subject to the unsafe condition. This proposed AD would require modification and repetitive inspections of the PPC lever linkage. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Mitsubishi Heavy Industries America, Inc., c/o Turbine Aircraft Services, Inc., 4550 Jimmy Doolittle Drive, Addison, Texas 75001; telephone: (972) 248-3108, ext. 209; fax: (972) 248-3321; internet: <https://mu-2aircraft.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0781; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** John Turner, Aerospace Engineer, FAA, Fort Worth ACO Branch, 10101 Hillwood Parkway, Fort Worth, Texas 76177; telephone: (817) 222-4508; fax: (817) 222-5245; email: johh.r.turner@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0781; Product Identifier 2018-CE-045-AD” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposed AD based on those comments.

Except for Confidential Business Information as described in the following paragraph and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this proposed AD.

**Confidential Business Information**

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is

customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to John Turner, Aerospace Engineer, FAA, Fort Worth ACO Branch, 10101 Hillwood Parkway, Fort Worth, Texas 76177; telephone: (817) 222-4508; fax: (817) 222-5245; email: johh.r.turner@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

## **Discussion**

The FAA issued AD 75-16-20, Amendment 39-2294 (40 FR 31751, July 29, 1975) (“AD 75-16-20”), for all Mitsubishi Heavy Industries, Ltd. (Mitsubishi) Models MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36 airplanes. AD 75-16-20 requires repetitively inspecting the PPC lever for security and proper rigging. AD 75-16-20 resulted from reports of the PPC lever linkage disconnecting from the engine. The FAA issued AD 75-16-20 to prevent separation of the PPC lever, which could lead to the inability to control the propeller pitch with the power lever in the cockpit and subsequent loss of control of the engine power settings.

### **Actions Since AD 75-16-20 was Issued**

Since the FAA issued AD 75-16-20, the FAA received reports of the PPC lever linkage disconnecting at the engine, which resulted in the inability to control the propeller pitch with the power lever in the cockpit. This condition, if uncorrected, could lead to loss of control of the engine power settings. In addition, Mitsubishi developed a secondary retention feature to secure the PPC. To correct this unsafe condition, the Japan Civil Aviation Bureau (JCAB), which is the aviation authority for Japan, issued JCAB AD No. TCD-8678-2016, dated February 5, 2016 (referred to after this as the mandatory continuing airworthiness information or “the MCAI”) to correct an unsafe condition for certain Mitsubishi Heavy Industries, Ltd. Model MU-2B, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, and MU-2B-36 airplanes. The MCAI requires replacing the PPC lever bolt with the new bolt.

This proposed AD would require this bolt replacement and would also require installing a secondary retention feature and repetitive inspections of the PPC lever to prevent future reoccurrence.

Also since AD 75-16-20 was issued, Mitsubishi has type certificated Models MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60 airplanes. These models have the same PPC configuration and are subject to the same unsafe condition. As a result, the proposed AD would add these models to the applicability. You may examine the MCAI in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0781.

## **Related Service Information under 1 CFR Part 51**

Mitsubishi has issued MU-2 Service Recommendation No. 049/76-002, dated June 29, 2018, and MU-2 Service Recommendation No. 080, dated June 29, 2018. This service information contains procedures for installing a PPC lever secondary retention feature to secure the PPC lever. These documents are distinct since they apply to different airplane models and configurations.

Mitsubishi has also issued MU-2 Service Bulletin No. 106/76-004, dated February 24, 2016, and MU-2 Service Bulletin No. 244, dated December 25, 2015. This service information contains procedures for replacing the PPC lever clamping bolt. These documents are distinct since they apply to different airplane models and configurations.

Honeywell International Inc. has issued Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011. The procedures in this service information include instructions for incorporating a threaded hole in the splined end of the shouldered shaft of the PPC assembly and re-identifying the shouldered shaft part number. The threaded hole is used to accommodate a secondary retention method to secure the PPC lever.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition

described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would retain the repetitive inspection requirements of AD 75-16-20 and would also require installing a secondary retention feature and reporting certain inspection results to the FAA. In addition, this proposed AD would add models to the applicability that were not type certificated when AD 75-16-20 was issued.

### **Differences Between this Proposed AD and the MCAI**

This proposed AD would require an installation of a secondary retention feature in the threaded end of the PPC input shaft, repetitive inspections of the security of the PPC lever, and reporting certain inspection results to the FAA. The MCAI does not include these requirements.

The applicability of the MCAI is limited to certain Mitsubishi airplane models and serial numbers. However, this proposed AD would apply to all Mitsubishi Models MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-26A, MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A, MU-2B-40, and MU-2B-60 airplanes because the type design allows installation of the affected PCC lever linkage on other models.

## Costs of Compliance

The FAA estimates that this proposed AD affects 260 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD. The average labor rate is \$85 per work hour.

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Modification	2 work-hours X \$85 per hour = \$170	\$2	\$172	\$44,720
Repetitive inspections	1 work-hour X \$85 per hour = \$85 per inspection cycle	\$0	\$85 per inspection cycle	\$22,100 per inspection cycle

The FAA estimates the following costs to do any necessary on-condition actions for the incorporation of the threaded hole and reporting requirement. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Incorporation of threaded hole	4 work-hours X \$85 per hour = \$340	\$1,000	\$1,340
Reporting	1 work-hour X \$85 per hour	\$0	\$85

If the PPC lever detaches, the necessary corrective actions could vary significantly from airplane to airplane. The FAA has received no definitive data that



would enable estimating the cost to install the PPC lever on each airplane or the number of airplanes that may require this action.

### **Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are mandatory as required by this AD; the nature and extent of confidentiality to be provided, if any. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 75-16-20, Amendment 39-2294 (40 FR 31751, July 29, 1975); and

b. Adding the following new AD:

**Mitsubishi Heavy Industries, Ltd.:** Docket No. FAA-2020-0781; Product Identifier 2018-CE-045-AD.

#### **(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 75-16-20, Amendment 39-2294 (40 FR 31751, July 29, 1975) (“AD 75-16-20”).

#### **(c) Applicability**

This AD applies to all Mitsubishi Heavy Industries, Ltd. (Mitsubishi) Models MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-26A,

MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A, MU-2B-40, and MU-2B-60 airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 61: Propellers.

**(e) Reason**

This AD was prompted by propeller pitch control (PPC) lever linkages disconnecting at the engine. The FAA is issuing this AD to address the PPC lever linkage from disconnecting at the engine, which could lead to the inability to control the propeller pitch with the power lever in the cockpit and consequent loss of control of the engine power settings.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Modification**

(1) For all airplanes except Model MU-2B and MU-2B-10 airplanes: Within 100 hours time-in-service (TIS) after the effective date of this AD or within 12 months after the effective date of this AD, whichever occurs first, modify the PPC lever linkage as specified in paragraphs (g)(1)(i) through (iii) of this AD, as applicable.

(i) Replace the PPC lever clamping bolt in accordance with the Accomplishment Instructions, section 2, of Mitsubishi MU-2 Service Bulletin No. 106/76-004, dated February 24, 2016, or Mitsubishi MU-2 Service Bulletin No. 244, dated December 25, 2015, as applicable to your model airplane.

(ii) For airplanes without a threaded hole in the splined end of the shouldered shaft of the PPC assembly, incorporate a threaded hole in accordance with the

Accomplishment Instructions, paragraph 3.C.(3)(d)2, of Honeywell International Inc. Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011.

(iii) Install a secondary retention feature in the threaded end of the PPC input shaft in accordance with the Accomplishment Instructions, section 2, of Mitsubishi MU-2 Service Recommendation No. 049/76-002, dated June 29, 2018, or Mitsubishi MU-2 Service Recommendation No. 080, dated June 29, 2018, as applicable to your model airplane.

(2) For Model MU-2B and MU-2B-10 airplanes: Within 100 hours TIS after the effective date of this AD or within 12 months after the effective date of this AD, whichever occurs first, replace the PPC lever clamping bolt and install a secondary retention feature in the threaded end of the PPC input shaft using a method approved by the Manager of the Fort Worth ACO Branch, FAA. The Manager's approval letter must specifically refer to this AD.

#### **(h) Repetitive Inspections and Reporting**

Within 100 hours TIS after replacing the bolt and installing a secondary retention feature as required by paragraph (g) of this AD and thereafter at intervals not to exceed 100 hours TIS, inspect the security of the PPC lever by pulling the PPC lever upward by hand to ensure it does not detach from the PPC input shaft. If the PPC lever detaches, do the following.

(1) Before further flight, install the PPC lever using a method approved by the Manager of the Fort Worth ACO Branch, FAA. The Manager's approval letter must specifically refer to this AD.

(2) Within 30 days after the PPC lever detachment or within 30 days after the effective date of this AD, whichever occurs later, report the results of the inspection,

including airplane model and serial number, to the FAA representative identified in paragraph (l)(2) of this AD.

**(i) Special Flight Permit**

(1) Special flight permits may be issued for the purpose of operating the airplane to a location where the requirements of paragraph (g) of this AD can be performed with the following limitations: Flights must not carry passengers, must operate in daytime visual meteorological conditions only, and must not operate in areas of known turbulence.

(2) Special flight permits may be issued for the purpose of operating the airplane to a location where the requirements of paragraph (h) of this AD may be performed without limitations.

**(j) Paperwork Reduction Act Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory as required by this AD; the nature and extent of confidentiality to be provided, if any. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance

Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

**(k) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Fort Worth ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the Fort Worth ACO Branch, send it to the attention of the person identified in paragraph (l)(2) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Japan Civil Aviation Bureau (JCAB) AD No. TCD-8678-2016, dated February 5, 2016, for related information. This MCAI may be found in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0781.

(2) For more information about this AD, contact John Turner, Aerospace Engineer, FAA, Fort Worth ACO Branch, 10101 Hillwood Parkway, Fort Worth, Texas 76177; telephone: (817) 222-4508; fax: (817) 222-5245; email: [johh.r.turner@faa.gov](mailto:johh.r.turner@faa.gov).

(3) For service information identified in this AD, contact Mitsubishi Heavy Industries America, Inc., c/o Turbine Aircraft Services, Inc., 4550 Jimmy Doolittle Drive, Addison, Texas 75001; telephone: (972) 248-3108, ext. 209; fax: (972) 248-3321; internet: <https://mu-2aircraft.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued on August 19, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-18562 Filed: 8/24/2020 8:45 am; Publication Date: 8/25/2020]